

Report Date: 25 Jun 2014

Summary Report for Individual Task
551-8ST-3021
Conduct Refueling Operations
Status: Approved

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD1 - The materials contained in this course have been reviewed by the course developers in coordination with the Transportation School, Fort Lee, Virginia 23801 foreign disclosure authority. This course is releasable to students from all requesting foreign countries without restrictions.

Condition: Given a Vessel in an Operational Environment (OE),moored alongside a pier, day or night,under good weather conditions, as a part of refueling operation.Youare required to assist in refueling operations.

Standard: Supervise and conduct proper refueling procedures to a Army vessel from an off hull source, IAW the appropriate Technical Manuals and local SOPs, Completed Risk Assessment, proper Safety Containment Equipment, Personal Protective Equipment (PPE),without injury or damageto personnel, the environment, and equipment.

Special Condition: None

Safety Risk: Medium

MOPP 4:

Task Statements

Cue: None

DANGER

None

WARNING

Fueling operations present a serious fire hazard. Verify that NO SOMKING signs are placed at designated locations. Make routine announcements that fueling operation are in progress. Take all necessary precautions as required by FM 55-502. Failure to comply can result in damaged equipment, the environment, and serious injury or death to personnel.

The wake of passing watercraft can cause the vessel to move significantly enough to separate the fuel hose. Failure to comply can result in damaged equipment, the environment, and serious injury or death to personnel.

CAUTION

Avoid overfilling any fuel tanks. Overfilling may result in a fuel spill and fire hazard. Ensure that vent caps are OPEN on oil fuel vents. Failure to comply may result in damaged equipment, the environment, and serious injury or death to personnel.

Remarks: None

Notes: None

Performance Steps

1. Conduct vessel preparation for refueling operation.

a. Conduct fuel sounding.

(1) Ensure Soldier uses sounding tape and paste or chalk to sound tanks.

(2) Ensure Soldier uses the current vessel sounding table to verify total gallons required.

Note: Do not exceed 95% of the fuel tanks capacity, 90% capacity in hot climates.

b. Verify Soldier has coordinated with the fueling facility.

Note: Prior to arriving at the fuel facility the exact amount of fuel and type (diesel #2, LIL SPEC 9000) required for the vessel should be known.

c. Verify Soldier clears all decks of flammable material.

d. Verify Soldier has secured all portholes, scuppers, hatches freeing ports and ventilation intakes on the side where fuel is being taken on.

e. Verify the Soldier stages the following required equipment.

(1) Ensure 2 fixed and portable fire extinguishers are staged.

(2) Ensure Emergency spill kits are stage.

(3) Ensure Fuel sample jars are on hand.

(4) Ensure handheld radios are on hand.

(5) Ensure Sounding tape and paste or chalk are stage.

(6) Ensure Sounding Table is on hand.

f. Verify Soldier properly align fuel hoses and fuel piping to receive fuel from an off hull source.

2. Conduct refuel operation procedures.

a. Verify Safety signs and announcements are implemented during refueling operations.

(1) Verify that NO SMOKING signs are placed at designated locations.

(2) Verify that routine announcements regarding fuelling operations are in progress.

(3) Verify that other precautions are taken as required by U.S. Army regulations and vessel's SOP.

b. Verify that the refueling team is following proper procedures.

(1) Ensure Soldier has placed drip pans at each connection to prevent accidental spillage from flowing into navigable waters.

(2) Ensure the Soldier has placed all grounding connections prior to connection any fuel hoses to fueling facility.

(3) Ensure Soldier has hoisted the BRAVO flag during refueling operations by day and that the RED LIGHT is lit by night.

(4) Ensure Soldier does not fill at a rate greater than 250 gallons per minute(gal/min.)

(5) Ensure Soldier has establish good communication between the refueling team and the refueling facility during refueling operations and for any emergency shutdown procedures.

c. Begin refueling operations.

(1) Ensure Soldier direct the fueling facility to begin sending fuel oil to the vessel.

(2) Ensure Soldier is monitoring tank levels at the TLIs (or sounding tape levels)vigilantly.

(3) Ensure Soldier opens the supply valve for the next tank to be filled as the tank reaches approximately 3/4 full.

(4) Ensure Soldier throttles down the supply valve of tank that is almost full.

(5) Ensure Soldier closes the fill valve, on the fuel oil manifold, for the selected supply tank.

(6) Ensure Soldier repeat these steps until all of the selected storage tanks are full.

(7) Ensure Soldiers are tending vessel's mooring lines during refueling operations.

3. Conduct stop refueling operation procedures.

a. Stop refueling operation.

(1) Ensure Soldier has directed the refuel facility to cease pumping when the final tank to be filled is near full.

(2) Ensure Soldier has verified pumping has ceased.

(3) Ensure Soldier has allowed all hoses to drain before closing the last fill valve on the fuel oil manifold.

b. Secure the fuel oil supply piping system.

(1) Ensure Soldier has disconnected the shore connection.

(2) Ensure Soldier has capped the hose connection fitting.

(3) Ensure Soldier closes and caps the deck fill connection valve.

(4) Ensure Soldier closes the last fill valve on the fuel oil manifold.

(5) Ensure Soldier verifies that all valves are in the closed position.

(Asterisks indicates a leader performance step.)

Evaluation Guidance: Score the soldier a GO if all performance measures are correctly completed/pass (P). Score the Soldier a NO-GO if any of the performance measures are missed or incorrectly performed/fail (F).

Evaluation Preparation: Safety precautions must be adhered to when performing the task listed in the prescribed technical manual (TM). Ensure that all required equipment to perform this task is available. Ensure Soldier understands

the refueling operation and procedures.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Conducted vessel preparation for refueling operation.			
a. Verified Soldier conducted fuel sounding.			
b. Verified Soldier coordinated with the fueling facility.			
c. Verified Soldier cleared all decks of flammable materials.			
d. Verified Soldier secured all portholes, scuppers, hatches freeing ports and ventilation intakes on the side where fuel is being taken on.			
e. Verified Soldier staged the required equipment.			
f. Verified Soldier properly aligned fuel hoses and fuel piping to receive fuel from an off hull source.			
2. Conducted refuel operation procedures.			
a. Verified safety signs and announcements are implemented during refueling operations.			
b. Verified refueling team followed proper refueling procedures.			
c. Verified Soldier stated refueling operations.			
3. Conducted stop refueling operation procedures.			
a. Verified Soldier stopped refueling operations.			
b. Verified Soldier secured fuel oil supply piping system.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	CFR 33	Navigation and Navigable Waters	No	No
	FM 55-502	Army Watercraft Safety (superseded by FM 4-01.502)	No	No
	TB 55-1900-206-14	CONTROL AND ABATEMENT OF POLLUTION BY ARMY WATERCRAFT	No	No

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT. Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

AR 200-1 delineates TRADOC responsibilities to integrate environmental requirements across DOTMLPF and ensures all training procedures, training manuals, and training doctrine includes sound environmental practices and considerations. The Army's environmental vision is to be a national leader in environmental and natural resource stewardship for present and future generations as an integral part of all Army missions. Environmental protection is never completed. Continuously be alert to ways to protect our environment and reduce waste.

Leaders must ensure that their unit has an active and strong environmental program. They must understand the laws and know what actions to take. Leaders bring focus, direction, and commitment to environmental protection. Commanding officers should ensure the following environmental programs are in place and are being maintained:-
Hazardous materials program.

Hazardous waste program.-Hazardous communications program.-Pollution prevention and hazardous waste minimization recycling program.-Spill prevention and response plan program.

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and

weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.

Prerequisite Individual Tasks : None

Supporting Individual Tasks :

Task Number	Title	Proponent	Status
551-88L-1024	Identify Fueling Procedures	551 - Transportation (Individual)	Analysis
551-88L-2041	Comply with Fueling Procedures	551 - Transportation (Individual)	Approved

Supported Individual Tasks :

Task Number	Title	Proponent	Status
551-88L-3046	Monitor Fueling Procedures	551 - Transportation (Individual)	Analysis
551-8ST-8126	Direct Fueling Operations	551 - Transportation (Individual)	Analysis Completed
551-88L-3046	Monitor Fueling Procedures	551 - Transportation (Individual)	Approved

Supported Collective Tasks :

Task Number	Title	Proponent	Status
01-2-0339	Perform Forward Arming And Refueling Point (FARP) Procedures	01 - Aviation/Aviation Logistics (Collective)	Approved
17-5-5000	Fuel a Tactical Vehicle	17 - Armor (Collective)	Approved
55-2-1508	Conduct Vessel Operations	55 - Transportation (Collective)	Approved
17-5-5000	Fuel a Tactical Vehicle	17 - Armor (Collective)	Analysis

ICTL Data :

ICTL Title	Personnel Type	MOS Data
MOS 88K Watercraft Operator SL3	Enlisted	MOS: 88K, Skill Level: SL3, Duty Pos: TAV
88L30 Watercraft Engineer	Enlisted	MOS: 88L, Skill Level: SL3, Duty Pos: TFR, LIC: EN
MOS 88K Watercraft Operator SL 4	Enlisted	MOS: 88K, Skill Level: SL4, Duty Pos: TFJ
88L40 Watercraft Engineer	Enlisted	MOS: 88L, Skill Level: SL4, Duty Pos: TGB, LIC: EN, SQI: O